- 2 A. Dr. John Straub. He is the partner
- 3 with Joe in the Building Science
- 4 Corporation.
- Q. Is Neil Moyer a part of that group as
- 6 well?
- 7 A. No, sir.
- 8 Q. And John Straub is -- what is his
- 9 background and credentials?
- 10 A. He is a -- I don't know. You'll have
- 11 to get that information from him. I'm
- 12 not fully familiar.
- 13 Q. Well, is he actively participating in
- 14 any level of expertise in these cases
- 15 that you're aware of?
- 16 A. I'm not aware of the status of that.
- 17 Q. Were you privy to conversations where
- discussions were had about his possible
- 19 involvement?
- 20 A. I talked to him about his possible
- 21 involvement.

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- 22 Q. What did you say to him?
- 23 A. In the conversation of the

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- removing-the-barriers issue, and he
- 2 offered to write a letter of review and
- 3 opinion and also help to support that
- 4 change being made in the standard. We
- 5 spoke about he was very aware of the
- 6 litigation that was going on down here.
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- 7 I simply mentioned that I would love to
- 8 have him as -- as part of the team, and
- 9 he agreed to speak to counsel. So --
- 10 and I don't know where it's went from
- 11 there.
- 12 Q. Anybody else that you've had
- 13 conversations with -- other design
- 14 professionals, engineers, architects --
- anyone else that you've been privy to
- 16 conversations or know about
- 17 conversations where people might be
- 18 added as experts in these cases?
- 19 A. I can't really recall -- yeah. There
- 20 was another gentleman a while back, but
- 21 I don't know -- that was a Mr. Bud
- Offerman, but I don't know if anything
- 23 ever -- I don't know, you know, what

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- 1 conversations or anything ever had.
- 2 Q. Has Mr. Straub or Dr. Straub ever
- 3 accompanied you on any kind of site
- 4 visits?

- 5 A. No, sir, he has not.
- 6 Q. Let's go to your first report. And you
- 7 and I are both very familiar with this,
- 8 so let me see if we can go through
- 9 quickly. Do you have it in front of
- 10 you?
- 11 A. Yes, sir.

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- 12 Q. Okay. Let's go to your conclusion on
- 13 the second page.
- 14 A. Yes, sir.
- 15 Q. Your first sentence, you say that it is
- 16 extremely moist conditions within the
- 17 perimeter walls.
- 18 A. That's my opinion, yes, sir.
- 19 Q. What amount of condensation must a wall
- 20 have to qualify for extremely moist in
- 21 your judgment?
- 22 A. That's simply my opinion based on homes
- 23 that I've seen in the past. When it's

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- 1 maxing out the meter like that and the
- bumps that I saw, then based on my
- 3 experience, in my opinion, those walls
- 4 were extremely moist.
- 5 Q. Do you have moisture-meter readings
- 6 here?

- 7 A. No. They're not depicted in the
- 8 report.
- 9 Q. I see on page 3, it says, Consistent
- readings were 25 to 40 percent?
- 11 A. Correct.
- 12 Q. All right. Is there anything else in
- 13 your report that discusses moisture
- 14 readings?
- 15 A. No, sir.
- 16 Q. And what percentage does it become Page 99

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- 17 extreme, in your judgment?
- 18 A. Typically, when we get -- I would
- 19 not --

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- 20 Q. Thirty percent, 10 percent?
- 21 A. No. I would say more, if we get over
- 22 20-25 percent. Typically, it's been my
- 23 experience if I see consistent readings

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- over 25 percent, that's when I've found
- from my sampling that -- that I start
- 3 finding the fungal growth. And that's
- 4 just based on my own experience. I've
- 5 also read literature that says 30
- 6 percent of relative readings are
- 7 conducive for mold growth.
- 8 Q. Well, if something more than 25 percent
- 9 is extreme, what would you qualify 80
- 10 percent as being? How would --
- 11 A. Well, it depends on the meter. My
- 12 meter, you know, when it maxes out up
- 13 there in the red, then I consider those
- 14 to be extreme readings.
- 15 Q. Is 40 percent a red?
- 16 A. Yes, sir, I believe it to be.
- 17 Q. Do you have the Tramex chart?
- 18 A. Well, that -- that was with my digital
- 19 meter. The actual red in that one
- 20 is -- is different. That's a relative
- 21 reading.

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- 22 Q. But we both agree that you can only
- 23 take relative readings in gypsum

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- because of the salt content.
- 2 A. Exactly. And in this -- in this
- 3 particular house when I reference that
- 4 25 to 40 percent, that's using my
- 5 digital meters.
- 6 Q. And what scale does your digital meter
- 7 have?

- 8 A. Again, it's -- it's digital. There's
- 9 not a scale on it. Typically, the
- 10 maximum reading that I'll get with my
- digital is 45 to 50 percent. I've seen
- it as high as 50, but that's in walls
- 13 that are --
- 14 Q. Is there green/yellow/red on --
- 15 A. No --
- 16 Q. -- the digital?
- 17 A. -- there's not a green/yellow/red. And
- 18 those are comparative readings to where
- 19 I was getting 10 to 12 percent
- 20 consistently on the interior walls and
- then the exterior walls were anywhere
- from 25 to 40 percent.
- 23 Q. You haven't mapped out in any paper

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- 1 anywhere which walls had which
- 2 readings?
- 3 A. No, sir, I did not.
- 4 Q. And you have no independent
- 5 recollection of that now?
- 6 A. No, sir. It was pretty much consistent
- 7 all the way around the house or I would
- 8 have noted it differently.
- 9 Q. Is it your opinion that the green/
- yellow/red on a wood scale is also
- 11 useful for gypsum?
- 12 A. On that meter, yes, sir. I had a
- definitive conversation and I have the
- 14 gentleman's name. And he pointed out
- in that particular brochure right there
- 16 that the relative scale is adjusted to
- 17 the green, yellow, and red.
- 18 Q. Well, this scale indicates that red on
- 19 the relative scale is something above
- 20 60 percent, maybe 65 percent.
- 21 A. That's correct.

- 22 Q. So you would agree with me that you
- found nothing in the red on this home.

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- 1 A. I disagree. I did not use that meter
- 2 in taking these readings. I used the
- 3 digital meter.
- 4 Q. So you have no evidence that any meter

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- 982parks.rough depo.txt that has a green/yellow/red on this 5
- 6 home indicated anything because you
- 7 never tested it for that.
- 8 Α. Not with that meter, no, sir.
- 9 Q. Or any other meter with the red/yellow/
- 10 green indicators.
- I don't recall. The meter that I used 11
- 12 during this inspection was the digital
- 13 meter.
- 14 And what's the name of the manufacturer
- 15 of the meter?
- 16 That's the Professional Equipment
- 17 meter.
- 18 That's that old one that dates back to
- 19 the '90s; right?
- 20 I'm not sure. Α.
- 21 Do you have calibration material on
- 22 that to show --
- 23 Not on that one, no, sir.

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- It's important to calibrate moisture 1
- 2 meters.
- 3 It depends. According, again, to
- 4 Tramex, it depends on what your intent
- 5 and purpose is. If you're trying to
- get quantitative measurement and using 6
- 7 it specifically for wood, possibly yes.
- 8 But if you're making relative readings,
- 9 then --

- 10 Q. Well, that's Tramex. But what about
- 11 Professional?
- 12 A. I've not had anything from them to say.
- 13 Q. So you don't know whether they
- 14 recommend calibration or not.
- 15 A. No. I'm simply, as I stated over and
- 16 over, making comparative measurements
- 17 to the inside/to the outside based on
- 18 my -- I've used this meter for years.
- 19 And based on my experience, it's my
- 20 opinion that those walls were extremely
- 21 moist.

- 22 Q. You've used the meter for years and
- 23 you've never calibrated it.

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- 1 A. This one, that's correct.
- 2 Q. Now, on page 2 of the report, you say
- 3 the moisture has caused structural
- 4 deterioration.
- 5 A. In my opinion, yes, sir, it has.
- 6 Q. Where in your report do you provide
- 7 evidence of that?
- 8 A. I would say that the mold sampling, the
- 9 fact that the -- we have mold present.
- 10 Q. Has affected the structure?
- 11 A. The gypsum board structure, in my
- 12 opinion, yes, sir.
- 13 Q. Can you show me any picture of any
- 14 wallboard anywhere where the back paper

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15	of the wallhoard	has been deteriorated

- 16 and degraded?
- 17 A. In my opinion --
- 18 Q. Specifically. Can you show me where
- 19 exactly?
- 20 A. Okay. Based on the testing showing
- 21 there was mold growth, Figure 1,
- 22 Figure 2 --
- 23 Q. Well, that's indication of mold growth,

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- 1 not that the structure's been
- 2 compromised; right?
- 3 A. In my opinion, if we've got moisture
- 4 and mold growth, then we've compromised
- 5 the structure of that gypsum board.
- 6 Q. At any level, any amount of mold?
- 7 A. Yes. If we've got mold growth -- if
- 8 we've got moisture and mold growth,
- 9 then yes. I don't think that --
- 10 Q. Even a light dusting is going to
- 11 compromise the structure?
- 12 A. You're kind of exaggerating. The -- my
- 13 statement is that if we have moisture
- 14 accumulation and mold growth, that is
- 15 compromising the materials, yes, sir.
- 16 That's -- that's eating away at the
- 17 materials. Now, I'm not saying that
- it's falling off the wall right now.
- 19 But I'm saying that it's not proper and

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20		982parks.rough depo.txt that is structurally compromising the
21		materials. They're not those
22		materials are not intended to
23		accumulate moisture and grow mold. And
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		130 ***UNCERTIFIED ROUGH DRAFT COPY***
1		it will eventually lead to the complete
2		demise of failure of the wall. That is
3		my opinion.
4	Q.	You don't have any data to show how
5		much moisture is acceptable in gypsum;
6		correct?
7	Α.	I disagree. There is there is
8		literature from the Gypsum Association
9		that shows what is normal, and then
10		they also say that any moisture that
11		it should not be exposed to moisture.
12		I mean, gypsum board is extremely
13		susceptible to moisture and
14	Q.	Right. What I'm trying to find out is,
15		has any authoritative material from the

- 16 Gypsum Association been promulgated
- 17 that you're aware of that indicates or
- 18 demonstrates that water above a certain
- 19 moisture amount for a certain period of
- 20 time will cause that actual wallboard
- 21 to fail.
- 22 A. I'm not familiar with that document,
- 23 no.

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- $1\,$  Q. Now, on page 3, of your report, you
- compare the (b)(1) to the (b)(2) wall;
- 3 correct?

- 4 A. Correct.
- 5 Q. Is there anywhere in either of your two
- 6 reports or in your field notes where
- 7 you actually make an opinion that
- 8 another design -- (b)(2), (b)(3),
- 9 waiver, AC, whatever -- is a better
- 10 alternative feasible design than
- 11 (b)(1)? Do you say is that anywhere in
- 12 your reports?
- 13 A. I think I depict that the (b)(2), in --
- in theory and intent, is a much more
- 15 appropriate wall structure than the
- 16 (b)(1).
- 17 Q. And we've already established you don't
- 18 know that you've ever seen one of
- 19 these.

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- 20 A. I can't say that I have or haven't.
- 21 Q. Now, you would agree with me if you
- found moisture readings of 25 to 40
- 23 percent, you can't say what the

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- absolute percentage of moisture in
- 2 those walls is because you didn't cut
- 3 and bake the sample.

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- 4 A. That is correct.
- 5 Q. And cutting and baking is the only
- 6 authoritative way to know for sure.
- 7 A. That's correct.
- 8 Q. Now, you did thermographic imaging in
- 9 this home.
- 10 A. Correct.

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- 11 Q. And do you agree with me that -- have
- 12 you looked at the standard that we
- 13 talked about from the last trial?
- 14 A. No, I have not.
- 15 Q. So you don't know sitting here today
- 16 whether your thermographic protocols
- 17 comport with or violate the standard
- 18 for imaging in homes such as this?
- 19 A. Well, that particular standard you're
- 20 referencing is -- is describing test
- 21 methods for insulation values
- 22 (unintelligible). And that's not what
- 23 my intent was in this home. So I never

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- in any way intended to test or identify
- 2 these issues by that. These pictures
- 3 are exemplary of helping to explain
- 4 where the -- how the heat and moisture
- 5 moves through the wall.
- 6 Q. All right. You would agree with me
- 7 that as between blue and orange or red
- 8 a couple of degrees' difference can Page 108

- 9 cause that picture?
- 10 A. It depends on the camera and your
- 11 settings.
- 12 Q. But it can. You could have a couple of
- degrees' difference in temperature
- 14 here.
- 15 A. No. I still -- well, I mean, you're --
- 16 you're --
- 17 Q. Looking at page 5.
- 18 A. -- being very general. There's more
- 19 than a couple of degrees, in my
- 20 opinion, between the red and the
- 21 blues --

- 22 Q. Did you --
- 23 A. -- the dark blues.

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- 1 Q. -- document that anywhere?
- 2 A. No, I did not.
- 3 Q. Hypothetically, you could set a camera
- 4 to show one or two degrees temperature
- 5 difference between blue and red.
- 6 A. Well, Mr. Commons proved he can cut and
- 7 paste and do that.
- 8 Q. Can you do it?
- 9 A. Actually, my camera will give a
- depiction of a square, which I've
- done -- well, anyway.
- 12 Q. But does it have any temperatures on
- 13 it?

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- 14 A. Yes, it will. It will have a high-low
- and a -- but I've not done that in this
- 16 case.
- 17 Q. So sitting here today, you don't know
- 18 what the temperatures on these walls
- 19 are.
- 20 A. That's correct. I don't know. I do
- 21 not.
- 22 Q. Why does it matter that you're taking a
- 23 picture of an internal marriage line

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- when we're talking about outside walls?
- 2 A. Well, because I was depicting the
- 3 similarity because that was an area
- 4 that I noted as an area in the mating
- 5 wall that wasn't sealed properly.
- 6 Q. And that can contribute to moisture in
- 7 the house.
- 8 A. That can contribute to moisture in that
- 9 wall structure.
- 10 Q. Well, I'm just wondering why you put it
- in your report if it has nothing to do
- 12 with the outside walls, which is what
- 13 this lawsuit is about.
- 14 A. Exemplary; shows similarities.
- 15 Q. Do you think that the air leakage in
- 16 the wall in the mating line plays any
- part in the moisture in the house or in
- 18 the walls?

- 19 A. In the exterior walls?
- 20 Q. Yes.

- 21 A. No, sir. No. But it will have the --
- 22 it will have the same effect on that
- 23 mating wall (indicating) as exterior

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- 1 wall.
- 2 Q. Is that an exterior wall?
- 3 A. No. That's the mating wall.
- 4 Q. So these pictures of the internal
- 5 walls, other than for illustrative
- 6 purposes, don't have anything to with
- 7 the exterior walls, in your judgment.
- 8 A. No, sir. I think I can agree with
- 9 that.
- 10 Q. On page 6, there's a fairly typical
- diagram I've seen in your reports with
- 12 the positive and negative pressure.
- Does this home have negative pressures
- 14 that you're concerned about?
- 15 A. No, sir. It was extremely minimal.
- 16 The duct leakage -- the duct system was
- 17 tight. I didn't find any significant
- 18 pressure imbalances that I would
- 19 consider significant, but I did
- 20 highlight the fact that someone had
- 21 improperly connected that ventilation
- 22 system.
- 23 Q. And what does the improper connection Page 111

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- of the ventilation system result in, in
- your judgment?

- 3 A. Well, it impedes the ability to bring
- 4 the fresh air in, which helps to, you
- 5 know, add so-called fresh air to the
- 6 home but also does help to offset any
- 7 minute duct leakage that may occur.
- 8 Q. Does this play any part in this case,
- 9 in your judgment?
- 10 A. I think it was improper, but that's not
- 11 what are making the walls do what
- 12 they're doing. It may escalate it a
- 13 little, but it's not making the walls
- 14 do what they're doing.
- 15 Q. And you would agree with me that the
- 16 manufacturer didn't install it this
- 17 way.

- 18 A. I would be more inclined to say that
- 19 the air conditioning person did it.
- 20 I've not seen the manufacturer ever
- 21 install one like that. But I did test
- 22 it, and I was not getting any flow
- 23 through it. So it was restrictive

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because of that.

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- 2 Q. Now, the next section of your report,
- 3 you have outdoor samples -- one outside
- 4 sample and three wall-cavity samples.
- 5 A. That's correct.
- 6 Q. Why did you pick the areas you chose?
- 7 A. Again, the bathroom area is because we
- 8 saw that was an area that was --
- 9 appeared to be the most problematic.
- The other two areas were just around
- 11 the -- around the perimeter where the
- 12 homeowner allowed us to test.
- 13 Q. Did you see any Ionic Breeze filters in
- 14 this house?
- 15 A. I don't remember anything like that.
- 16 Q. If someone says that you tested the
- 17 screens or filters on the Ionic
- 18 Breezes, they would be mistaken?
- 19 A. That I tested them?
- 20 Q. Yes, sir.

- 21 A. Yes, sir. I've never tested anything
- like that, that I can recall.
- 23 Q. Now let's go to page 7 of the report

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- there, paragraph 1. Mold contamination
- 2 is considered present in building when
- 3 the total mold spore concentration per
- 4 cubic meter is above 10,000 (Baxter,
- 5 ETS). Do you see that?
- 6 A. Yes, sir.

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- 7 Q. That's talking about the indoor ambient
- 8 air; right?
- 9 A. That's right.
- 10 Q. That doesn't specifically address air
- 11 samples from wall cavities.
- 12 A. No, sir, it does not.
- 13 Q. And we've already established you
- 14 didn't take any indoor air samples to
- 15 know whether the indoor air pursuant to
- 16 Baxter/ETS exceeds 10,000.
- 17 A. That's correct.
- 18 Q. Now, the next section, you have
- 19 paragraph 2. The National Allergy
- 20 Bureau considers mold counts in air.
- 21 You see that?
- 22 A. That's correct.
- 23 Q. Has low, moderate, high, very high.

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1 A. Correct.

- 2 Q. Again, you didn't test any of the
- 3 indoor air to know where or whether it
- 4 falls in any of those categories.
- 5 A. No, sir, I did not. I put those in
- 6 there as references because those
- 7 are -- there are very few thresholds of
- 8 any type that are published out there
- 9 as what's considered to be abnormal.
- 10 Q. Would you agree with this statement:
- 11 Indoor air that falls below 10,000 per

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- 12 cubic meter is acceptable?
- 13 A. Well, typically, the EPA recommends
- 14 that -- that the indoor -- if you're
- 15 comparing the indoor air to the outdoor
- 16 air, it should be -- the contents of
- the indoor care should be approximately
- 18 one-third or lower of the outdoor.
- 19 Q. Would you agree that there's no well-
- 20 established quantitative standard for
- 21 fungal spores on surfaces or in air?
- 22 A. Yes. That's why I said these are the
- 23 only -- a couple of the -- the few that

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- 1 are established out there or that's
- been -- I say "established" -- that's
- 3 been published.

- 4 Q. Would you agree with this statement:
- 5 Mold contamination is present in a
- 6 building when the inside air exceeds
- 7 10,000 mold count?
- 8 A. Well, it depends on by what standard
- 9 that you're --
- 10 Q. Baxter/ETS.
- 11 A. I think that's what it says.
- 12 Q. It's what I'm reading from.
- 13 A. Yes.
- 14 Q. All right. So when you put this 25,000
- and this 10,000, you would agree with
- 16 me that this really has nothing to do

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17	with	anything	else	ín	your	repo	rt	

- 18 because these have to do with indoor
- 19 air and you didn't test the indoor air.
- 20 A. I did not test the indoor air.
- 21 However, I do believe, because these
- are some published thresholds that are
- out there, that it gives us some kind

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- of idea of about what we should or
- 2 should not expect as being abnormal.
- 3 Q. But that's your opinion. You don't --
- 4 A. That is my opinion.

- 5 Q. You don't have any authoritative source
- 6 to indicate one way or the other
- 7 whether indoor wall or -- whether wall
- 8 sampling that you took can be applied
- 9 to these standards.
- 10 A. I agree. That's my opinion.
- 11 Q. I think we've already established
- whatever is inside that wall, in your
- judgment, you have no way of knowing
- 14 whether it's communicating to the
- 15 inside air.
- 16 A. That's correct. I wouldn't expect it
- 17 to be. But, I mean, I did not test
- 18 that so . . .
- 19 Q. And you're not here to say that
- whatever mold in the air you found in
- the walls is causing anyone any health

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- problems in the house?
- 23 A. No, sir. I speak to no health issues

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- 1 whatsoever.
- 2 Q. Do you consider your testing methods
- 3 aggressive? Do you know what
- 4 aggressive mold sampling is?
- 5 A. That would -- you would have to define
- 6 what your terminology of "aggressive"
- 7 is.
- 8 Q. Well, aggressive is when you go into a
- 9 wall cavity and move anything around,
- which can actually cause mold to come
- 11 up from another surface. Are you
- 12 familiar with that?
- 13 A. If it's not there, you can't stir it
- 14 up. So I believe my methodology to
- be -- to be adequate as -- I mean, I've
- 16 even consulted with my lab. They've
- 17 agreed that it's an acceptable sampling
- 18 methodology.
- 19 Q. Now, when you test in a wall, you drill
- 20 two holes; right?
- 21 A. That is correct.
- 22 Q. And then you put a hose in the wall.
- 23 A. That is correct.

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- 1 Q. Right? And that hose bumps up against
- 2 the back of the insulation.
- 3 A. Hopefully not.
- 4 Q. Well, the insulation is three inches.
- 5 right, in width?
- 6 A. We hope it's three and a half inches.
- 7 Q. Three and a half. And the wall cavity
- 8 is three and a half.
- 9 A. That's correct.
- 10 Q. So you've got to touch the insulation
- 11 when you go back in there.
- 12 A. No, sir. That's the purpose of
- drilling the second hole so that I can
- 14 insert the probe and push the
- 15 insulation back and -- and establish a
- 16 cavity there for putting it in. Now,
- 17 there have been occasions where I've
- 18 put the probe in or for some reason
- whatsoever the samples have came back
- 20 with a -- with a high level of
- 21 contamination or -- or -- of other
- 22 debris, which impeded the lab from
- 23 reading the sample.

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- 1 Q. That's my point, though. You're
- 2 actually moving the insulation.
- 3 A. Exactly, yes, sir. Otherwise, you're
- 4 just going to suck up insulation and
- 5 you're not going to get a readable Page 118

- 6 sample.
- 7 Q. Do you know why you skipped a line
- 8 there?
- 9 A. Yes, sir. I do that intentionally to
- simply separate my outdoor sample from
- my wall-cavity samples.
- 12 Q. Where do these numbers come from in the
- 13 left-hand column?
- 14 A. Off the Air-O-Cell itself.
- 15 Q. This one on the bottom is a different
- 16 batch.
- 17 A. Possibly, yes, sir.
- 18 Q. Different number.
- 19 A. Okay.
- 20 Q. Do you agree?
- 21 A. Yes, sir.
- 22 Q. Now, the blanks that you send in to the
- lab, they actually come from the same

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1 batch?

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- 2 A. Sometimes the lab will provide a blank.
- 3 That's something that they recommend be
- 4 done, so they -- they will provide that
- 5 for me at times.
- 6 Q. But isn't the purpose of a blank to
- 7 establish that the Air-O-Cell cells
- 8 that you pull from in a box of other
- 9 cells are not contaminated?
- 10 A. That's correct.

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- 11 Q. Do you know whether this blank was
- 12 pulled from that same lot or from a
- 13 different lot?
- 14 A. I don't know how they do that. But
- 15 they -- they have told me that either
- 16 they can either provide the blank at
- 17 the lab or I can send one with it. But
- if there was a contamination, then I
- 19 think you would see irregular or
- 20 inconsistencies within the samples
- 21 where we've seen an incredible amount
- of consistency with the outdoor samples
- 23 as well as the variety of wall samples

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- 1 and the contributaries to explain the
- 2 elevation.

- 3 Q. Well, here's my point. You've got five
- 4 lab tests and only four in your chain
- 5 of custody.
- 6 A. Correct. That means the lab provided
- 7 the -- that was a laboratory-provided
- 8 blank.
- 9 Q. Did you find any walls that were soft
- 10 to the touch in this home?
- 11 A. Yes. I noted the medium range, ten to
- 12 a hundred square foot, being soft and
- one to ten square foot of visible mold.
- 14 Q. But that was in your interview section;
- 15 right?

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- 16 A. No. That's problems noticed.
- 17 That's -- that was -- that was below
- 18 the customer interview section. But
- 19 that's where I walked through and
- 20 actually looked.
- 21 Q. Which walls?

- 22 A. I didn't note specifically which ones
- 23 were soft and which ones were not.

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- 1 Q. So sitting here today, you don't know
- 2 which of the walls were soft?
- 3 A. No. I couldn't specifically point out
- 4 which ones.
- 5 Q. Now, you only indicated one to ten
- 6 square foot of visible mold.
- 7 A. That's correct.
- 8 Q. Is that on the inside of the house, the
- 9 inside of the wall, outside of the
- 10 house? Where did you indicate that?
- 11 A. Correct. And that visible mold that I
- 12 indicated was -- what I assume to be
- mold from all the bumps on the wall,
- 14 that was in several locations at those
- bumps.
- 16 Q. Where specifically? because I want to
- go back out there and look at it.
- 18 Where specifically were the bumps?
- 19 A. Two areas in the master bath, one on
- the end wall one, one on a side wall, Page 121

- 21 and then the third area, I believe, was
- 22 maybe -- I can't recall specifically,
- 23 but for some reason, I want to say it

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- was either in a living room or -- I
- 2 don't recall the -- I remember that --
- 3 seems like I remember there being three
- 4 specific areas. I remember
- 5 specifically the two areas in the
- 6 master bathroom, one on the end wall
- 7 and one on the side wall.
- 8 (Defendants' Exhibit #6 was
- 9 marked for identification.)
- 10 Q. I'm going to show you Exhibit #6. This
- is your sketch. Do you see that?
- 12 A. Yes, sir.
- 13 Q. Would you take a pen and draw arrows
- 14 where I should look if I want to see
- bumps on walls?
- (witness complied.)
- 17 Q. Now, you're drawing one in the master
- 18 bath.
- 19 A. Uh-huh.
- 20 Q. Would you put a little one next to that
- 21 and circle it?
- 22 (Witness complied.)
- 23 Q. Okay. That's two. All right.

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- 1 A. Those are the two that I can
- 2 specifically recall.
- 3 Q. And you have no pictures of those?
- 4 A. No, sir, not that I can utilize now.
- 5 Q. Let's go --
- 6 A. I do have pictures, but I didn't put
- 7 them in my report and use them so . . .
- 8 Q. Of the drivers we identified a little
- 9 while ago, negative pressure is not
- 10 playing a part in this home in your
- judgment; correct?
- 12 A. Correct.
- 13 Q. So wind-driven rain, possible;
- thermodynamics, possible; bulk water
- 15 leaks, possible. Those are the range
- of other drivers that we ought to
- 17 consider.
- 18 A. That you listed, yes, sir.
- 19 Q. And you never interviewed the homeowner
- 20 to know whether there were bulk water
- 21 leaks.
- 22 A. Okay. No, sir, because in my opinion,
- 23 when I investigated the house and found

#### \*\*\*UNCERTIFIED ROUGH DRAFT COPY\*\*\*

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- 1 the consistency of the elevated
- 2 moisture all the way around the
- 3 perimeter of the house, typically a

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- 982parks.rough depo.txt water leak is isolated to certain areas 4
- 5 or general area. If I would have found
- 6 elevated moisture in isolated areas.
- 7 then I would have looked more to the
- 8 bulk water leak than I did the
- 9 condensation issue.
- 10 The mold sampling you did, does it
- 11 establish whether the mold was active
- 12 or old mold?
- 13 Α. No. sir.
- 14 So it's possible that if you found the
- 15 presence of mold spores in the walls.
- 16 it could be, if there was a water leak,
- 17 from water, in a bulk water context.
- 18 Are we speaking specifically about the
- 19 air samples or the bulk samples that I
- 20 took as well?
- 21 Well, take them one at a time. The air
- 22 samples.

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23 Okay. And ask that question again.

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- 2 You said you don't know whether the
- mold is active or old. 3

I'm sorry.

- 4 Α. It doesn't tell us if it's viable or
- nonviable; that's correct. 5
- 6 And you would agree that if there's
- 7 testimony and evidence in this case
- that there was a substantial water leak 8

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			982parks.rough	depo.txt
9	in the	bathroom	that permeated	the

- 10 walls that that could have caused mold
- in the walls, hypothetically speaking.
- 12 A. Hypothetically speaking. But also
- 13 because of the fact that I found
- 14 moisture elevated in those walls and
- 15 found the walls -- I would want to see
- 16 a test that says that it is nonviable
- 17 and that there's not viable mold
- 18 growing in there.
- 19 Q. And to this point and because your
- 20 reports are now in, you don't know
- 21 sitting here today whether they're
- 22 viable or not.
- 23 A. No, sir, I don't.

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## \*\*\*UNCERTIFIED ROUGH DRAFT COPY\*\*\*

- 1 Q. Which means you can't rule out prior
- 2 water damage.
- 3 A. Not by the air -- well, no. In my
- 4 opinion, I don't believe that to be the
- 5 case. I didn't see the evidence. The
- 6 evidence I did see showed the
- 7 consistent moisture all the way around.
- 8 And then with the bulk sampling, I
- 9 think it reiterated that -- that the
- 10 only two samples that came back clean
- 11 were samples that were taken from hot
- 12 closet areas, so --
- 13 Q. What --

- 982parks.rough depo.txt -- those temperature being higher. 14
- 15 What would a serious water leak to a Q.
- gypsum board do to the gypsum? How old 16
- 17 would it affect it?
- 18 Well, if it came from the ceiling, it
- 19 would leave a stain. If it came -- if
- 20 it was a wall leak, now you're talking
- 21 about putting water into the wall which
- 22 raises the humidity level in the wall
- 23 cavity. It wouldn't necessarily leave

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- 1 a visible stain.
- 2 Have you ever seen a gypsum wallboard
- 3 with, like, a watermark on it, you
- 4 know, like a stain that goes three or
- 5 four feet across?
- Yes, sir. 6 Α.

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- 7 What is that caused from? Q.
- 8 Typically, those kind of stains are
- 9 more of a water-leak stain.
- And you don't know whether this home 10
- 11 has any of those.
- 12 I didn't -- I didn't see those when I
- 13 was there, no, sir.
- If I can show you a picture of one in 14
- 15 this house, would that change your
- 16 analysis or your opinion in any way?
- 17 No, sir. You know, you're not going
- 18 to -- not unless that -- not unless

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- 982parks.rough depo.txt that water leak is consistent all the 19
- 20 way around the house.
- 21 But relative to the mold testing you
- 22 did in that cavity, you don't think
- 23 that plays any part.

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- Oh, if there was a water leak in that
- 2 cavity, then that -- that could
- 3 theoretically, hypothetically, have
- 4 played a -- that was why my
- 5 recommendation was to go back and take
- 6 the random samples from all the way
- 7 around the house, a bulk sample from
- 8 the gypsum itself.
- But you still don't know whether it's 9
- 10 viable or not.
- 11 No. But in order for that mold growth
- 12 to occur, in my opinion, based on my
- 13 experience -- and it's my opinion that
- 14 it's from the condensation problem
- 15 because of the improperly used vapor
- 16 barrier.
- 17 Now, in your second report -- and we're
- 18 getting close to being done -- this is
- 19 the one you just generated from last
- 20 month's visit; correct?
- 21 Correct. Α.
- 22 You've got four slides that appear to Q.
- 23 be borrowed from Mr. Conlin; correct?

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- 1 Yeah, I think they did come from --
- 2 from one of this -- one of his
- 3 presentations, actually. Those
- specific pictures were copied from that
- 5 one.
- 6 Q. You know what a hyphae is, H-Y-P-H-A-E?
- 7 Α. Yes, sir.
- 8 What's a hyphae? Q.
- 9 The hypha -- hypha/hyphae -- are the
- 10 little rootlike systems that grow out
- from the mold and into the materials. 11
- 12 What's a mycelium? Q.
- 13 The mycelium is the -- the mycelium
- 14 fragments are typically where those
- 15 have broken off and looked for extended
- 16 moisture. They -- they actually form.
- like, a matting over the materials. 17
- 18 Did you see any evidence of hyphae or
- 19 mycelium in this --
- 20 That cannot always be seen by the eye.
- 21 But I saw a lot of -- a lot of stuff
- 22 that looked like mold growth, and
- 23 that's why I cut it out and had it

#### \*\*\*UNCERTIFIED ROUGH DRAFT COPY\*\*\*

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- 1 sampled.

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2 well, I guess my questions is -- you've Page 128

- 3 got pictures of hyphae and mycelium.
- 4 My question is, do you have any
- 5 photographic evidence that there's
- 6 hyphae or mycelium --
- 7 A. No. These --
- 8 Q. -- in this wall?
- 9 A. No, not photographic evidence. The
- 10 purpose of this is to explain, as it
- 11 says, the four stages of mold growth
- 12 and why the lab tests for the things
- 13 that it tests for.
- 14 Q. So what stage are we in, in your
- 15 judgment?

- 16 A. Well, because you've got active mold
- growth in there, I mean, we pulled air
- 18 samples that showed the -- the
- 19 considerably elevated spore counts.
- 20 And then from the samples of the
- 21 materials itself, they categorize it
- 22 light, moderate, heavy, and
- 23 different -- different areas.

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- 1 Q. Hang on a second. I'm confused. You
- 2 just told me a minute ago that you
- 3 don't know whether any of this mold is
- 4 actually viable.
- 5 A. That's correct. I don't know
- 6 definitively because I didn't do viable
- 7 testing. My opinion is that it is, Page 129

- 8 because of the fact we had moisture
- 9 present and the lab samples show that
- 10 the mold is there. So --
- 11 Q. But you haven't tested for it, so you
- 12 can't say authoritatively.
- 13 A. That's -- I've said that before. Yes,
- 14 sir.

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- 15 Q. So which stage are we in -- one, two,
- 16 three, or four?
- 17 A. Where at?
- 18 Q. Well, I mean, you walk me through the
- 19 building. If you think it's different
- 20 in different places, tell me.
- 21 A. Well, I believe that the mold growth is
- 22 occurring in different stages all the
- 23 way through the building.

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- 1 Q. Well, where is the --
- 2 A. I didn't identify each specific stage
- 3 at each specific point. My -- my
- 4 purpose of testing was to establish
- 5 that there was growth in the materials.
- 6 Q. My point is, you just stuck this in
- 7 your report, but you don't tie these
- 8 slides to anything that's data in your
- 9 report.
- 10 A. I disagree.
- 11 Q. Where is there Stage 4 mold growth in
- 12 this home?

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- 13 A. Okay. Stage 4 mold growth is where the
- 14 spores are released. We have air
- 15 sampling that shows elevated spore
- 16 counts. Back up to Stage 3. Stage 3,
- 17 shows the hypha, in both the air
- 18 sampling and the -- or the mycelia --
- 19 are -- they've sampled for that in the
- 20 mycelia fragments and the -- the
- 21 samples in this screening and in the
- 22 air samples. So my purpose for putting
- 23 that in there is to explain the stages

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- of mold growth, where it comes out, and
- 2 then how that ties in to the sampling
- 3 and what was found.
- 4 Q. What's a conidia?

- 5 A. The conidia is the stalk, the stalk
- 6 that the mold spores are released from.
- 7 Q. And you think this is Stage 4 all over
- 8 the building?
- 9 A. You're putting words in my -- as I
- 10 said, yes. I mean, I -- we have got
- elevated air samples; we've got
- 12 moisture in the walls. So yes, I
- 13 believe we have mold actively growing
- in the walls.
- 15 Q. Is it your --
- 16 A. That's my opinion.
- 17 Q. -- opinion that you have Stage 4 mold Page 131